Mr. Jay Hereford Graham Packaging Company 2401 Pleasant Valley Road York, PA 17402

Dear Mr. Hereford:

Re: Exempt Construction and Operation Status, 163-15648-00160

The application from Graham Packaging Company, received on May 20, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission unit, to be located 5504 Foundation Drive, Evansville, Indiana 47725, is classified as exempt from air pollution permit requirements:

(a) Four (4) plastic molding units, each with a maximum capacity of processing 700 pounds per hour, and one (1) plastic molding unit with a maximum processing capacity of 737 pounds per hour.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the plastic molding units shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour
P = process weight rate in tons per hour

For each plastic molding unit with maximum process weight rate of 700 pounds per hour, the PM emission rate shall be limited to 2.03 pounds per hour.

For each plastic molding unit with maximum process weight rate of 737 pounds per hour, the PM emission rate shall be limited to 2.1 pounds per hour.

Graham Packaging Company Evansville, Indiana

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An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

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cc: File - Vanderburgh County

Vanderburgh County Health Department

Evansville EPA

Air Compliance - Scott Anslinger Permit Tracking - Janet Mobley

Technical Support and Modeling - Michele Boner

Compliance Data Section - Karen Nowak

# **Indiana Department of Environmental Management** Office of Air Quality and Evansville EPA

# Technical Support Document (TSD) for an Exemption

# **Source Background and Description**

Source Name: **Graham Packaging Company** 

Source Location: 5504 Foundation Drive, Evansville, IN 47725

County: Vanderburgh

SIC Code: 3085

Operation Permit No.: 163-15648-00160 Permit Reviewer: Madhurima Moulik

The Office of Air Quality (OAQ) has reviewed an application from Graham Packaging Company relating to the construction and operation of a plastic molding and packaging facility.

### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

(a) Four (4) plastic molding units, each with a maximum capacity of processing 700 pounds per hour, and one (1) plastic molding unit with a maximum processing capacity of 737 pounds per hour.

#### **Enforcement Issue**

There are no enforcement actions pending.

## Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 20, 2002, with additional information received on June 12, 2002.

## **Emission Calculations**

Emission Factor for plastic molding = 1 lb of VOC/ton (Wisconsin DNR)

Maximum capacity = 3537 lb/hr

Potential to Emit of VOC = 1 lb VOC/ton x 3537 lb/hr x (1 ton/2000 lb) x 8760 hr/yr x 1 ton/2000 lb

Permit Reviewer: Madhurima D. Moulik

## = 7.75 tons per year

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	Negligible
PM-10	Negligible
SO <sub>2</sub>	Negligible
VOC	7.75
CO	Negligible
NO <sub>x</sub>	Negligible
HAPs	Negligible

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.

# **County Attainment Status**

The source is located in Vanderburgh County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
$NO_2$	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vanderburgh County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Vanderburgh County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

## **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

## State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Vanderburg County and the potential to emit pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

# State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the plastic molding units will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the plastic molding units shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour
P = process weight rate in tons per hour

For each plastic molding unit with maximum process weight rate of 700 pounds per hour, the PM emission rate shall be limited to 2.03 pounds per hour.

For each plastic molding unit with maximum process weight rate of 737 pounds per hour, the PM emission rate shall be limited to 2.1 pounds per hour.

The potential to emit of each of the five (5) plastic molding units is negligible. Therefore, the source is in compliance with this rule.

326 IAC 8-1-6 (General provisions relating to VOC rules: general reduction requirements for new facilities)

The five (5) plastic molding units each have potential VOC emissions of less than 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply.

## Conclusion

The construction and operation of this plastic molding and packaging facility shall be subject to the conditions of the attached Exemption No. 163-15648-00160.